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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,598	07/22/2003	Atsuko Koizumi	501.42942X00	5837
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MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C. 1800 DIAGONAL ROAD SUITE 370 ALEXANDRIA, VA 22314			EXAMINER PADMANABHAN, KAVITA	
			ART UNIT	PAPER NUMBER
			2161	

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/623,598

Applicant(s)

KOIZUMI ET AL.

Examiner

Kavita Padmanabhan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/22/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-14 are pending.
2. Claims 1-14 are rejected.

Claim Language

3. Claims 1, 9, and 10 contain "intended use" functionality language such as "memory unit for storing", "association attaching unit for attaching", "unit to calculate", "unit for extracting", "unit for clustering", "display unit for displaying", "a first dictionary for storing", and "a second dictionary for restoring".

Applicant is advised that "intended use" language in the claims does not add patentable weight. If applicant's intent is to claim the functional language, applicant is advised to change "memory unit for storing" to "memory unit storing", for example.

Claim Objections

4. **Claim 9** is objected to because of the following informalities:

The phrase "said key term" should be changed to "said key terms" at line 6 of the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claims 3-6 and 9** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation "said retrieval unit" in line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claims 4-6 each recite the limitation "said display unit" in line 10 of the respective claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "said command input unit" in line 14 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "said key words" in line 15 of the claim. There is insufficient antecedent basis for this limitation in the claim.

The examiner will apply prior art to these claims as best understood, giving the claim language its broadest reasonable interpretation, in light of the above rejections.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. **Claims 1 - 9 and 14** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a test of whether the invention is categorized as a process, machine, manufacture or composition of matter and if the invention produces a useful, concrete and tangible result. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) are found to be non-statutory subject matter. For a method claim to pass muster, the recited process must produce a useful, concrete and tangible result.

In the instant case, **claim 14** recites a program comprising software per se, and is therefore not statutory. Furthermore, the steps performed by program appear to be directed towards an abstract idea and do not produce a useful, concrete and tangible

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result. In particular, the result of claim 14 appear to be the analysis of data, which is an abstract idea and does not constitute a tangible result.

In the instant case, **claims 1-9** recite a processor, memory, an association attaching unit and an analysis unit. Reciting a processor and memory with instructions that perform a method is the same as saying a computer implemented method as it is merely form over substance. As a result, claims 1 is nonstatutory for the same reasons as claim 14 as explained above. **Claims 2-9** are similarly nonstatutory.

The examiner will apply prior art to these claims as best understood, with the assumption that applicant will amend to overcome the stated 101 rejections.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. **Claims 1-3 and 14** are rejected under 35 U.S.C. 102(e) as being anticipated by **Kantrowitz** (US 6,622,140).

In regards to **claim 1**, **Kantrowitz** teaches an information processor comprising:

- a memory unit for storing multiple data (**Kantrowitz; Fig. 5, reference character 514**);
- an association attaching unit for attaching common associations to data possessing a common word or term among the stored data (**Kantrowitz; col. 12, line 63 – col. 13, line 37 – text constitutes stored data, and data which contain stopwords are commonly associated**); and
- an analysis unit for analyzing said data (**Kantrowitz; Fig. 5, reference character 516; also see code in cols. 7-8**),
- wherein the analysis unit analyzes data with no associations by using a negative word dictionary, and data with associations is analyzed by different analysis (**Kantrowitz; col. 12, line 63 – col. 13, line 37 – data with associations, i.e. data are stopwords, are analyzed and identified for removal of the stopwords; col. 12, lines 27-57 – affect lexicon constitutes a negative word dictionary; col. 13, line 43 – col. 14, line 17 – data with no associations, that is, the data not associated with stopwords, are analyzed with an affect lexicon**).

In regards to **claim 2**, **Kantrowitz** teaches an information processor according to claim 1, comprising:

- an input unit (**Kantrowitz; col. 8, lines 15-26 – input to the code**); and

- a unit to search said database using a key word received by way of said input unit, wherein said association attaching unit attaches the associations to the extracted retrieval result data (**Kantrowitz; col. 5, lines 28-32, 41-52 – the retrieved results are stored data upon which the analysis process discussed above has been performed**).

In regards to **claim 3**, **Kantrowitz** teaches an information processor according to claim 2, wherein

- said input unit receives a specified count extracted in said retrieval unit (**Kantrowitz; col. 8, lines 15-26 – “if” block receives input that is the value of distancelimit**), and
- said analysis unit analyzes data possessing associations extracted by a count larger than said count, and data possessing associations extracted by a count smaller than said count, by a different analysis method (**Kantrowitz; col. 8, lines 15-26 – if affectoffset is less than distancelimit, the analysis includes the “if” block, if not, then the analysis is different in that it performed an analysis process, only without the processing of the “if” block; col. 13, lines 48-64**).

Claim 14 is rejected with the same rationale given for claim 2.

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. **Claims 4-6 and 10-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kantrowitz in view of O'Dell** (US 6,801,659), and further in view of **Sukehiro et al.** (US 2004/0205671, hereinafter "Sukehiro").

In regards to **claim 4**, **Kantrowitz** teaches an information processor according to claim 1 and also teaches a display unit that is capable of displaying information (**Kantrowitz; Fig. 5, reference character 510; col. 6, lines 2-4**).

Kantrowitz does not expressly teach said negative dictionary comprises a first dictionary storing words in Chinese character units and a second dictionary for storing words containing said Chinese characters, and said analysis unit searches from said data for words stored in said first and said second dictionary and from words containing Chinese characters retrieved from said first dictionary displays words not in said second dictionary on said display unit, and from among said displayed words stores specified terms in said second dictionary.

O'Dell teaches dictionaries storing the Chinese equivalent of letters and words (**O'Dell; col. 3, lines 21-27; Fig. 1, reference character 8, 12, 16; col. 8, lines 39-42**).

Sukehiro teaches adding terms that are found in a first dictionary but are not found in a second dictionary are added to the second dictionary (**Sukehiro; par [0149], lines 4-8**).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement the information processor of Kantrowitz using the Chinese characters and words taught by O'Dell in the affect lexicon, thereby allowing the processor to be used with character-based data, such as Chinese data (**O'Dell; col. 1, lines 18-22; col. 2, lines 21-22**). It would further have been obvious to one of ordinary skill in the art at the time of the applicant's invention to incorporate the feature of Sukehiro, whereby when checking the phrases of Kantrowitz against the negative dictionary implemented as a first and a second dictionary, when a term is in the first dictionary but not in the second dictionary, meaning a character matches a character from the first dictionary but a sequence of characters in the text do not match a

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sequence of characters in the second dictionary, this sequence of characters is displayed to the user via the display unit of Kantrowitz in order to allow a user to add the sequence of characters to the second dictionary, as taught by Sukehiro. This would provide the benefit of making the affect lexicon more complete for future use based on the user's needs.

Claims 5 and 6 are each rejected with the same rationale given for claim 4.

Claims 10-13 are rejected with the same rationale given for claim 6, wherein it would have been obvious to store words that are not specified separately from the first and second dictionary to provide more efficient storage of the data, as is well known in the art.

14. **Claims 7-8** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kantrowitz in view of Komissarchik et al.** (US 5,799,276, hereinafter "Komissarchik").

In regards to **claim 7**, **Kantrowitz** teaches an information processor according to claim 1. Kantrowitz does not expressly teach a dictionary for storing words expressing modalities, wherein said analysis unit performs analysis using said dictionary.

Komissarchik teaches a dictionary including modal verbs (**Komissarchik; col. 11, lines 15-32**).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement the affect lexicon of Kantrowitz incorporating modal verbs as taught by Komissarchik in order to provide all permissible grammatical forms of a word (**Komissarchik; col. 11, lines 15-32**), thereby making the lexicon more complete.

Claim 8 is rejected with the same rationale given for claim 7.

15. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Kantrowitz in view of Hlava et al.** (US 6,898,586, hereinafter "Hlava").

In regards to **claim 9**, **Kantrowitz** teaches an information processor according to claim 2, comprising: a unit to calculate the association level between a word and a word from said stored data (**Kantrowitz; col. 13, lines 33-35, 43; col. 13, line 48 – col. 14, line 42**), a unit for extracting key terms from said stored data (**Kantrowitz; col. 12, lines 15-17; col. 12, line 63 – col. 13, line 37, col. 13, lines 48-64**), a display unit (**Kantrowitz; Fig. 5, reference character 510; col. 6, lines 2-4**).

Kantrowitz does not expressly teach a unit for clustering said key term using said information association level and generating a thesaurus overview, and displaying key terms belonging to clusters of the thesaurus overview selected by said input unit, and key terms specified by said command input unit from said displayed key terms being set as said key words.

Hlava teaches a thesaurus display and allowing users to modify the relationships specified in the thesaurus (**Hlava; col. 12, lines 1-25**).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement the information processor of Kantrowitz using the thesaurus display and editing function of Hlava, whereby, when a term, for example, is found in the stored data, which is based on an association level in that a term from the lexicon is associated with a term in the stored data for it to match, a list of synonyms for that term can be displayed and then added to the dictionary if the user chooses, thereby being set as a future keyword that might be extracted. This would provide the benefit of allowing the user to add or remove associations from the database dictionary (**Hlava; col. 12, lines 13-25**).

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kavita Padmanabhan** whose telephone number is **571-272-8352**. The examiner can normally be reached on Monday-Friday, 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kavita Padmanabhan
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AU 2161

February 28, 2006

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